



SIB 16x40 GR
BINOCULARS
WITH IMAGE STABILIZATION

IMPORTANT INFORMATION

Read prior to activation

You have just purchased a complicated electronic device. To operate it properly, please read this manual carefully. Here are some common precautions that must be noted.

- **NEVER** hit the unit while operating or being transported
- **NEVER** transport the unit without the case
- **NEVER** disassemble the unit. This device contains high speed rotating parts, which may be hazardous to you!
- **NEVER** engage the stabilizing mode while the power supply control indicator is not glowing or less than 1 minute after activating the unit
- **NEVER** turn off the unit while stabilizing mode is engaged
- **NEVER** reverse the polarity of a battery
- **ALWAYS** remove batteries when not in use for a long period
- **ALWAYS** keep the objective lenses covered when not in use
- **ALWAYS** store in a warm dry place when not in use

10. QUALITY CERTIFICATE

The SIB 16x40 GR is suited for usage.

Production date _____

Serial number _____

Quality Inspector signature _____

Purchase date _____

Salesman _____

Quality assurance seal

9. CUSTOMER SUPPORT

Should you experience any difficulties with your Newcon OPTIK product, consult the enclosed manual. If the problem remains unresolved, contact our customer support department at (416) 663-6963 or Toll free at 1-877-398-6666. Our operating hours are 9am-5pm, Monday - Friday, Standard East Time.

At no time should equipment be sent back to Newcon without following the instructions of our technical support department.

Newcon accepts no responsibility for unauthorized returns.

To locate NEWCON Authorized Dealer call:

Tel: (416) 663-6963 Fax: (416) 663-9065

Email: NEWCONSALES@NEWCON-OPTIK.COM

INTERNET: <http://WWW.NEWCON-OPTIK.COM>

The defective products should be shipped to:

In USA: 3310 Prospect Ave. Cleveland, OH 44115

In Canada: 1183 Finch Ave. W., Suite 302, Toronto, ON M3J 2G2

From international:

1183 Finch Ave. W., Suite 302, Toronto, ON M3J 2G2, CANADA

Features of the SIB 16x40 Gyro binoculars

- Stabilized image
- Rigid construction
- Value priced 70% below competition
- Wealth of accessories
- Water Resistant
- Night Vision eyepieces (optional)

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**BEFORE USE CAREFULLY READ ALL THE INSTRUCTIONS!
FAILURE TO OBEY THE INSTRUCTIONS WILL VOID THE
WARRANTY!**

1. BRIEF DESCRIPTION

SIB 16x40GR Gyro Stabilizing Binoculars is a modern, universal optical device designed for observation and tracking of distant objects and serve both amateur and professional needs:

- Observation aboard aircraft, land vehicles, boats or other moving platforms
- Law enforcement and security
- Search and rescue
- Military
- Space

The device incorporates the image stabilization technology, which enables the user to observe distant objects from moving and nonmoving platforms without degrading of the image resolution because of jolt or normal hand tremors.

Combining fully coated, computer designed optics with high-speed internal gyrostabilizing system, SIB 16×40GR is the ultimate instrument for long-range observation, tracking and surveillance. High magnification, easy to carry and handle allow shake free observation under any demanding conditions.

8. WARRANTY

NEWCON OPTIK warrants this product against defects in material and workmanship for one year from the date of the original date of consumer's purchase, but no more than 18 months from the date of manufacturing. Should your Newcon product prove defective during this period, please bring the product securely packaged in its original container or an equivalent, along with proof of the date of original purchase, to your Newcon Dealer. Newcon will repair (or at its option replace), the product or part thereof, which, on inspection by Newcon, is found to be defective in materials or workmanship.

What This Warranty Does Not Cover:

NEWCON is not responsible for warranty service should the product fail to be properly maintained or fail to function properly as a result of misuse, abuse, improper installation, neglect, damage caused by disasters such as fire, flood, lightning, improper electrical current, or service other than by a NEWCON Authorized Service. Postage, insurance, or shipping costs incurred in presenting your NEWCON product for warranty service are your responsibility. Please include a check or money order made out to NEWCON OPTIK for the amount of \$15.00 to cover shipping and handling. This covers products shipped in USA or Canada only.

7. TROUBLE SHOOTING

The stabilizing mode does not work.

Check that the batteries are installed properly. Check the charge of the batteries. Replace if they are weak. Do not use old batteries with new ones.

The image does not appear in focus.

Bring the inspected object to the center of the image. Turning the eyepieces (8), adjust to achieve the clearest image on the screen. If the view still does not seem in focus, clean the lenses. They could be foggy or dusty.

Image is 'waving' when stabilizing mode has been engaged.

This is a typical 'warming-up' effect that will last for no more than one minute after engaging the stabilizing mode.

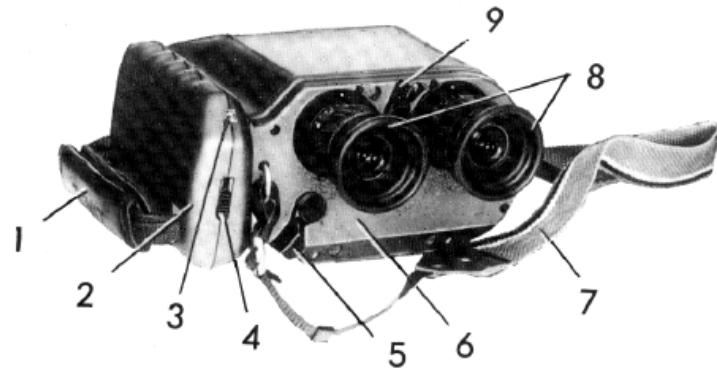
Condensation accumulates on the parts

In order to avoid misting of the eyepiece lens in cold time use special protective covers.

Image has disappeared during nighttime observation (using optional night eyepieces).

When bright light gets into the objective lens of the night vision device it may result in disappearing of the image as the automatic shut-off feature comes into action to protect the device. Whenever this happens, turn the switch to the OFF position. In a minute or two the device will be ready for further operation.

2. APPEARANCE OF THE DEVICE

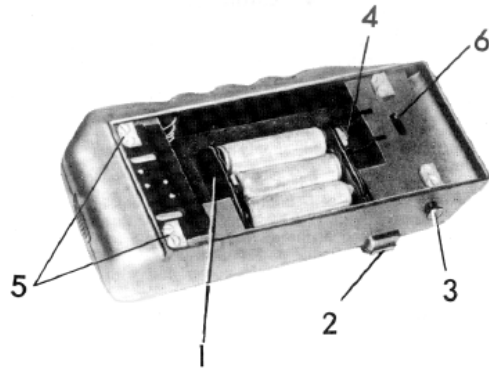


1—hand strap; 2—power supply unit; 3—power supply control indicator; 4—power supply voltage switch; 5—stabilizing mode engaging lever; 6—device front panel; 7—neck strap; 8—eyepieces; 9—interpupillary adjustment lever.

Fig. 1

For ease of operation, the device is fitted with neck strap (7) and hand strap (1). Eyepieces (8), interpupillary adjustment lever (9) and stabilizing mode engaging lever (5) are positioned on the front panel (6) of the device. Power supply unit (2) is a detachable part of the device.

Power supply voltage switch (4) and power supply control indicator (3) are at the front of the device.



1—cartridge with AA type batteries; 2—connector;
3—pin; 4—cramp; 5—delimiter; 6—lock

Fig. 2 – Power Supply Unit

The device is powered by either a cartridge with batteries (1) or by an on-board power source 12 ± 1.2 V via connector (2).

The power supply unit is attached to the device using delimiter (5) and lock (6).

Pin (3) opens the delimiter of the power supply unit.

Cartridge (1) with batteries is fixed in the power supply unit with cramp (4).

6. STORAGE AND MAINTENANCE INSTRUCTIONS.

Warning! After transportation or keeping the device at temperature lower than -25°C (-13°F), the device must be warmed up to ambient temperature for at least 6 hours before operating.

Precautions: SIB 16x40 GR is a sophisticated precision optical instrument equipped with electronics. Therefore, it should be handled with due care.

- Keep your device away from direct sunlight, impacts, dust, moisture, and sudden changes of temperatures.
- Do not keep the device at temperatures higher than 50°C (122°F).
- Do not touch the optical surfaces with fingers. Doing so may damage the anti-reflection coating.
- Avoid shocks and sharp jolts.
- Cleaning of optical surfaces is only allowed with professional camera lens cleaning supplies.
- To clean the exterior of the device, use a soft clean cloth.
- Do not take the cover off the lens if not necessary.
- Keep away from heating appliances and central heating.
- Make sure to switch off the unit during periods of non-operation.
- Remove the batteries when storing the device for long period of time.
- Do not apply superfluous efforts at work with lens assembly, agile elements and thread connections.
- The manufacturer can only make repair works.
- Due to considerable optical magnification of the optional night eyepiece some small structures inside the tube coating in the form of dark and/or white points may be seen in the field of view, which does not affect the serviceability of the device.

- In no less than a minute, press lever 5 (fig. 1) in the arrow indicated direction in order to engage the stabilizing mode and hold it in this position while observing.

ATTENTION! It is not allowed to engage the stabilizing mode of the device when the power supply control indicator is not glowing, or in less than a minute after device has been turned ON.

When finishing the observation

release lever 5 (fig. 1). The lever should return to the initial position. Now the stabilizing mode has been switched off. Switch OFF the power supply unit.

5.3. Preparing the Device for Operation from On-board Source

- Replace the cartridge with batteries 1 (fig. 2) with a voltage transformer available in the complete set of the device.
- Connect the cable, supplied in the complete set, to the power supply unit connector 2 (fig. 2).
- Connect the device to the on-board power source.
- Then prepare the device for operation as outlined in the paragraph 5.2.

3. TECHNICAL CHARACTERISTICS

Magnification	16 ^x
Angular field of view	3.4°
Exit pupil diameter, mm	2.5
Minimum focus, m	30
Interpupillary adjustment, mm:	58 – 72
Dioptric adjustment, not less, dptr	±5
Transmission factor, not less	0.55
Parallelism of eyepiece axes of sight:	
- Divergence on vertical plane, not exceeding:	20'
- Convergence on horizontal plane, not exceeding:	20'
- Divergence on horizontal plane, not exceeding:	60'
Power source (batteries):	6 (AA)
From an on-board source, V	12
Angular velocity of panning in any direction, degree/sec:	0 - 6
Stabilization freedom, degrees	±5
Overall dimensions, mm:	215×190×96
Weight (w/o batteries), kg,	1.98
Relative humidity (at +25°C) %:	Up to 98
Temperature range, °C	-30 ÷ +45
Temperature range during transportation, °C	-50 ÷ +50

4. SUPPLIED ACCESSORIES

SIB 16x40 Gyro is supplied in the following assembly:

- Device	1 pc.
- Objective lens caps	2 pc.
- Carrying Case	1 pc.
- Neck Strap	1 pc.
- Hand Strap	1 pc.
- DC regulator	1 pc.
- User's manual	1 pc.
- Warranty card	1 pc.
<u>Optional accessories:</u>	
- Amber Filters (optional)	2 pc.
- Night Vision eyepieces (optional)	2 pc.

5. OPERATION INSTRUCTIONS

5.1. Preparing the Device for Operation without Image Stabilization

1. Remove the device from the case and adjust neck strap (7) and hand strap (1) (fig. 1).
2. Remove the protective caps from the objective lenses and, if necessary, mount the optional light filters.
3. Adjust the interpupillary distance-using lever (9).
4. Adjust the dioptric correction by rotating rings on the eyepieces (8).
5. Now the device can operate as a conventional 16^x magnification binocular.

5.2. Preparing the Device for Operation with Image Stabilization

1. Put the lens caps on the objective lenses. Take the power supply unit in your left hand.
2. Pull out pin (3) on the power supply unit (fig. 2) and disconnect the power supply unit from the device with an easy movement towards you.
3. Insert six AA batteries into the cartridge (1) (fig. 2) observing correct polarity.
4. Mount the cartridge with batteries into the power supply unit (2) (fig. 1) and secure it by cramp (4) (fig. 2).
5. ATTENTION! To avoid damage of the cramp, while mounting the cartridge into the power supply unit, particular attention must be drawn to its position respecting to the body of the power supply unit. While the cartridge is being mounted into the power supply unit, the cramp should be placed above the cartridge.
6. In order to connect the power supply unit to the device, pull out pin (3) with an easy movement in the direction away from you and then release the locator to bring the power supply unit against the delimiter. Turn on the device by setting supply voltage switch (4) (fig. 1) to ON position and check the power supply unit for proper operation (indicator (3) must glow brightly).